˙Abstract

An interpolation system interpolates image positions in an original image to produce an interpolated output image, wherein the original image is represented by digital

5   input pixel data. A first filter with a sharp interpolation characteristic, that interpolates a selected image position in the image to generate a sharp interpolation output value. A second filter having a smooth interpolation characteristic, that interpolates the

10   selected image position in the image to generate a smooth interpolation output value. A controller that calculates a weighting coefficient for the output of each filter. And, a combiner selectively combines the output values from the filters as a function of the weighting coefficients, to

15   generate an interpolation output value for the selected image position of an interpolated output image.